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SERIAL NO.: 09/992,909

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	Atty. Docket
THOMAS JUSTEL ET AL	DE 000030
Serial No.: 09/795,613	Art Unit: 2879
Filed: February 28, 2001	Examiner: M. SANTIAGO

Title: PLASMA PICTURE SCREEN WITH BLUE PHOSPHOR

Commissioner for Patents
Alexandria, VA 22313-1450

APPELLANT'S BRIEF ON APPEAL UNDER 37 C.F.R. § 1.192

Sir:

Appellants present their brief on appeal as follows:

REAL PARTY OF INTEREST

The real party of interest is the assignee, Koninklijke Philips Electronics N.V., and not the parties named in the above caption.

RELATED APPEALS AND INTERFERENCES

With regard to identifying by number and filing date all other appeals or interferences known to appellants which will directly effect or be directly affected by or have a bearing on the Boards' decision in this appeal, Appellants are not aware of any such appeals or interferences.

STATUS OF THE CLAIMS

Claims 1, 4, 5, and 8 stand rejected and are appealed and Claims 2, 3, 6, and 7 stand objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

STATUS OF AMENDMENTS

An amendment after final rejection was presented subsequent to the final rejection on October 13, 2004 which was considered not persuasive according to the November 2, 2004 Advisory Action.

SUMMARY OF THE INVENTION

The present invention includes a plasma picture screen provided with a luminescent layer that includes a blue Eu^{2+}-activated phosphor an UV-C light emitting phosphor. The mixing of a UV-C light emitting phosphor with an Eu^{2+}-activated phosphor or coating of an Eu^{2+}-activated phosphor with a covering layer of UV-C light emitting phosphor reduces the photodegradation of the Eu^{2+}-activated phosphors in the VUV range.

THE ISSUES

I. Whether under 35 U.S.C. § 102(b), the differences between the invention of Claims 1, 4, 5, and 8 and Japanese Patnet number JP 09-263756 (Masahiko) are such that the invention

as a whole would have been anticipated when the invention was made to those of ordinary skill in the art.

PRIOR ART

1. JP 09-263756 (Masahiko)

GROUPING OF CLAIMS

With regard to the rejection of Claims 1, 4, 5, and 8 under 35 U.S.C. § 102, the claims stand or fall together.

ARGUMENT

I. Whether under 35 U.S.C. § 102(b), the differences between the invention of Claims 1, 4, 5, and 8 and JP 09-263756 (Masahiko) are such that the invention as a whole would have been anticipated when the invention was made to those of ordinary skill in the art.

Masahiko fails to anticipate every element of Appellants' Claim 1, either explicitly or inherently.

The Final Office Action and November 2, 2004 Advisory Action rejected Claims 1, 4, 5, and 8 under 35 U.S.C. § 102(b) as being anticipated by Masahiko (JP 09-263756; hereinafter "Masahiko"). Appellants respectfully traverse the rejection as improper and request its withdrawal. The Final Office Action argues that Masahiko discloses a fluorescent layer applied in a paste form which has been homogenously mixed in order to obtain the highest emission efficiency. The Final Office Action proceeds: "formation of a paste/slurry coating is made from a suspension as further evidenced by Ratna et al. Ratna

acknowledges that the inhomogeneity of the "mixing" results in inefficient matrix formation as well as nonuniform incorporation of the fluorescence centers in the matrix, thus the suspension is homogeneously mixed."

A proper § 102(b) rejection requires that the invention was patented or described in a printed publication more than one year prior to the date of the application for patent in the U.S. Thus the claim must be anticipated by the reference by itself or inherently. Neither type of anticipation is presented in the current Office Action which relies on Ratna to support its § 102(b) rejection over Masahiko. Thus Appellants respectfully traverse the § 102(b) rejection as improper.

In addition, because Masahiko specifically calls for "homogeneously mixing a blue-, green- or red- emitting phosphor (A)_ with an ultraviolet-emitting phosphor B..." (emphasis added). "Homogeneous," in this case, is an antonym of "heterogeneous," implying a uniform mixture of both constituent parts. Thus Masahiko fails to recite or suggest all the elements of Appellants' Claim 1, and furthermore, actually teaches away from Appellants' invention, in that it calls for the opposite type of mixture. Appellants believe Claim 1 to be patentable for at least these reasons.

Claim 8 recites a luminescent screen substantially corresponding to the plasma picture screen of Claim 1 and is believed patentable for at least the same reasons.

Claims 4-5 depend from independent Claim 1 discussed above and are believed patentable for at least the same reasons. In addition, Appellants respectfully believe Claims 4-5 to be independently patentable and request separate consideration of each claim.

CONCLUSION

For all of the above reasons, it is respectfully submitted that the final rejection of Claims 1, 4, 5, and 8 is in error. Accordingly, reversal of the final rejection of each of these claims is respectfully solicited.

This brief is being filed in triplicate.

Respectfully submitted,

By_____
Aaron Waxler
Reg. 48,027
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APPENDIX

1. A plasma picture screen provided with a luminescent layer, which has a heterogeneous mixture of an Eu^{2+} -activated phosphor and a UV-C light emitting phosphor.

2. A plasma picture screen as claimed in claim 1, characterized in that the UV-C phosphor is chosen from the group consisting of: $LaPO_4$:Pr, YPO_4:Pr, YBO_3:Pr, Y_2SiO_5:Pr, $LuBO_3$:Pr, and YPO_4:Bi.

3. A plasma picture screen as claimed in claim 1, characterized in that the Eu^{2+}-activated phosphor is chosen from the group consisting of: $BaMgAl_{10}O_{17}$:Eu and $(Ba,Sr,Ca)_5(PO_4)_3Cl$:Eu.

4. A plasma picture as claimed in claim 1, wherein the luminescent layer comprises a mixture of particles of the Eu^{2+}-activated phosphor and particles of the UV-C phosphor.

5. A plasma picture screen as claimed in claim 4, characterized in that the proportional quantity of the particles of the UV-C phosphor lies between 1 and 50% by weight.

6. A plasma picture screen as claimed in claim 1, characterized in that the particles of the Eu^{2+}-activated phosphor are coated with a layer of the UV-C phosphor.

7. A plasma picture screen as claimed in claim 1, characterized in that the luminescent layer comprises a base layer which contains the Eu^{2+}-activated phosphor and a covering layer which contains the UV-C phosphor.

8. A luminescent screen provided with a luminescent layer which contains a heterogeneous mixture of an Eu^{2+}-activated phosphor and a UV-C phosphor.

9. (Cancelled)

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